

Cont'd
as

6. (Amended) The method of claim 1 further including implanting oxygen.

Please cancel claims 18 and 27.

Please amend claim 33 as follows:

33. (Amended) A method of forming a trench isolation comprising:

defining an opening in a masking layer over a semiconductor structure;

causing impurities to enter a portion of said structure through said opening to enhance the oxidation of said structure beyond that which would be expected from crystallographic damage effects; and

using said mask to form a trench through the portion of said structure containing said impurities.

Remarks

Claims 1-4, 7, 18, 27, 33, 35, and 39 were rejected under §102(e) as being anticipated by Hong.

However, all the claims call for implanting impurities which enhance the oxidation of a structure beyond that which would be expected from crystallographic damage effects. Hong produces a structure which has the effects expected from crystallographic damage.

For example, referring to Hong, it is clear that before Hong does the oxidation step set forth in column 4, lines 13 through 28, he implants phosphorous or arsenic. See column 3, lines 55 through 57. These species (without a diffusion step) would merely exhibit crystallographic damage effects.

In contrast, other species may be specifically selected that have enhanced oxidation effects compared to those effects arising by implant damage without diffusion. For example, at page 8,